

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME: 90 n60

Address/Phone No. : Fernhurst  
 Haslemere  
 Surrey  
 GU27 3JE  
 (01428) 644061

Emergency Phone No.: (01622) 814777

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Product Code : 15218

HAZARDOUS INGREDIENT(S)	CAS No.	Z(w/w)	Symbol	R Phrases
Alkylphenol Ethoxylate		92	Xn	R22 R36/38
Isobutanol	000078-83-1	<10	Xn	R10 R20 R36

## 3. HAZARDS IDENTIFICATION

Irritating to eyes and skin.  
 Flammable.  
 Toxic to aquatic organisms.

## 4. FIRST-AID MEASURES

Inhalation : Remove patient from exposure, keep warm and at rest. Obtain medical attention as a precaution.

Skin Contact : Take off immediately all contaminated clothing. Wash skin immediately with water, followed by soap and water. Such action is essential to minimise contact with skin. Contaminated clothing should be laundered before re-issue.

Eye Contact : Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.

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Ingestion : If swallowed seek medical advice immediately and show the container, label or this Data Sheet, if possible. Do not induce vomiting.

**Further Medical Treatment**

Symptomatic treatment and supportive therapy as indicated.

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**5. FIRE-FIGHTING MEASURES**

Flammable.

Keep fire exposed containers cool by spraying with water.

Extinguishing Media : For small fires, use foam, carbon dioxide, dry powder or halon extinguishant. For large fires, use polar-resistant foam or water-fog; avoid use of water jet. Contain run-off water with, for example, temporary earth barriers.

Fire Fighting Protective Equipment : A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

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**6. ACCIDENTAL RELEASE MEASURES**

Ensure suitable personal protection during removal of spillages. This means wearing eye protection, chemically resistant gloves, boots and coveralls. Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Wash the spillage area with water. Washings must be prevented from entering surface water drains.

Spillages or uncontrolled discharges into water courses must be alerted to the National Rivers Authority.

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**7. HANDLING AND STORAGE**

**7.1 HANDLING**

Read the label before use.

Avoid contact with skin and eyes. Do not breathe spray. When using do not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.

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## 7.2 STORAGE

Keep in original containers, tightly closed, out of reach of children. Keep away from food, drink and animal feeding stuffs. Protect from frost.

Storage Life : Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

When using this product refer to the label for details.

### Occupational Exposure Limits

HAZARDOUS INGREDIENT(S)	LTEL 8hr TWA		STEL		OES
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Isobutanol	50	150	75	225	OES

Not applicable to field use.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: liquid
Colour	: brown
Odour	: mild
pH (Value)	: Not available.
Boiling Point (Deg C)	: Not available.
Melting Point (Deg C)	: Not available.
Flash Point (Deg C)	: not less than 38
Auto Ignition Temperature (Deg C)	: Not available.
Explosive Properties	: Not applicable.
Oxidising Properties	: Not applicable.
Vapour Pressure (mm Hg)	: Not available.
Solubility (Water)	: soluble
Partition Coefficient	: Not available.
Specific Gravity	: 1.034

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## 10. STABILITY AND REACTIVITY

Hazardous Decomposition Product(s) : Combustion or thermal decomposition will evolve toxic and irritant vapours.

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PRODUCT NAME: AGRAL

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### 11. TOXICOLOGICAL INFORMATION

This health hazard assessment is based on a consideration of the composition of this product.

- Inhalation : Unlikely to cause harmful effects under normal conditions of handling and use.
- Skin Contact : Irritating to skin.  
Unlikely to cause skin sensitisation.
- Eye Contact : Irritating to eyes.
- Ingestion : Low oral toxicity.  
Oral Median Lethal Dose(> 2000mg/kg) (rat).
- Long Term Exposure : No long term risks to man are associated with the normal handling and use of this material.
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### 12. ECOLOGICAL INFORMATION

#### Toxicity

This ecological assessment is calculated from data available on the components of the formulation.

Nonyl phenol ethylene oxide condensate is: Toxic to aquatic organisms.

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### 13. DISPOSAL CONSIDERATIONS

Do not contaminate ponds, waterways or ditches with chemical or used containers. Dispose of product concentrate, diluted product and empty containers according to the 'Code of Practice for the Safe Use of Pesticides on Farms and Holdings' available from HMSO. Empty containers should not be used for other purposes.

Disposal should be in accordance with local, state or national legislation.

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### 14. TRANSPORT INFORMATION

UN No. : 1212  
UN Pack. Group : III

#### AIR

ICAO/IATA Class  
-primary : 3 FLAMMABLE LIQUID

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SEA  
IMDG Class  
-primary : 3.3 FLAMMABLE LIQUID  
Proper Shipping Name : ISOBUTANOL SOLUTION

ROAD/RAIL  
ADR/RID Class : 3  
ADR/RID Item No : 31(c)

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#### 15. REGULATORY INFORMATION

This product is covered by the Control of Pesticides Regulations, 1986. It has therefore been labelled in accordance with these Regulations. Users should ensure that they comply with any relevant local, state or national legislation.

EEC Classification : IRRITANT & FLAMMABLE

Hazard Symbol : X1  
Risk Phrases : R36/38: Irritating to eyes and skin.  
Safety Phrases : S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S37/39: Wear suitable gloves and eye/face protection.

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#### 16. OTHER INFORMATION

This data sheet was prepared in accordance with Directive 93/112/EC.

Use : To improve the wetting and spreading properties of fungicidal, insecticidal and weed killing sprays.

AGRAL is the property of a ZENECA Group company.  
Read the label before you buy: use pesticides safely.

The information on this sheet is not a specification, it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed.

The following sections contain revisions or new statements: 2; 8; 11; 14

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